Figure 1
Prior Art

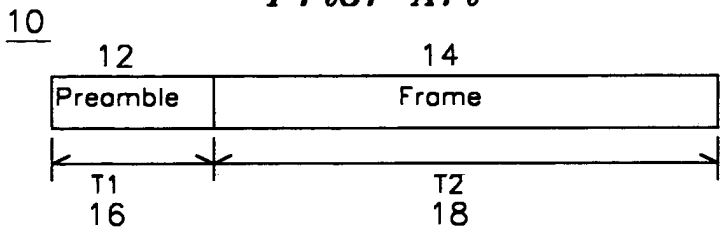


Figure 2a
Prior Art

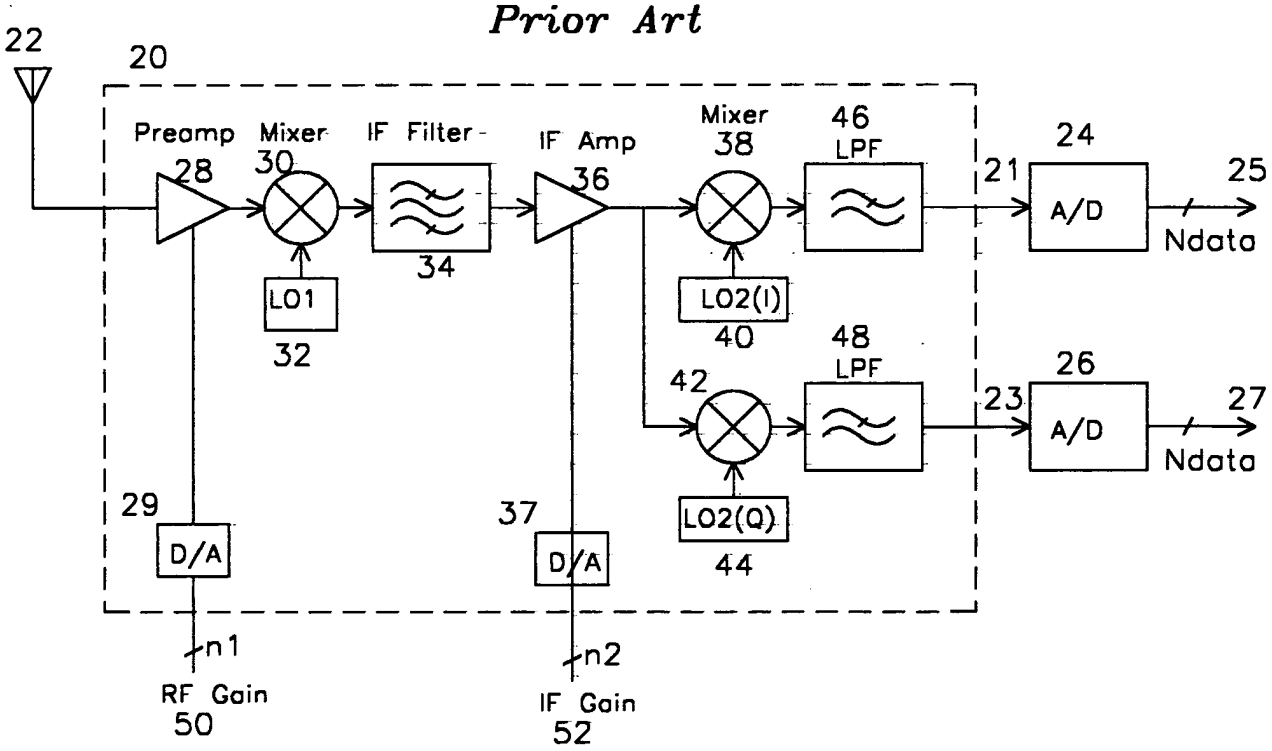


Figure 2b
Prior Art

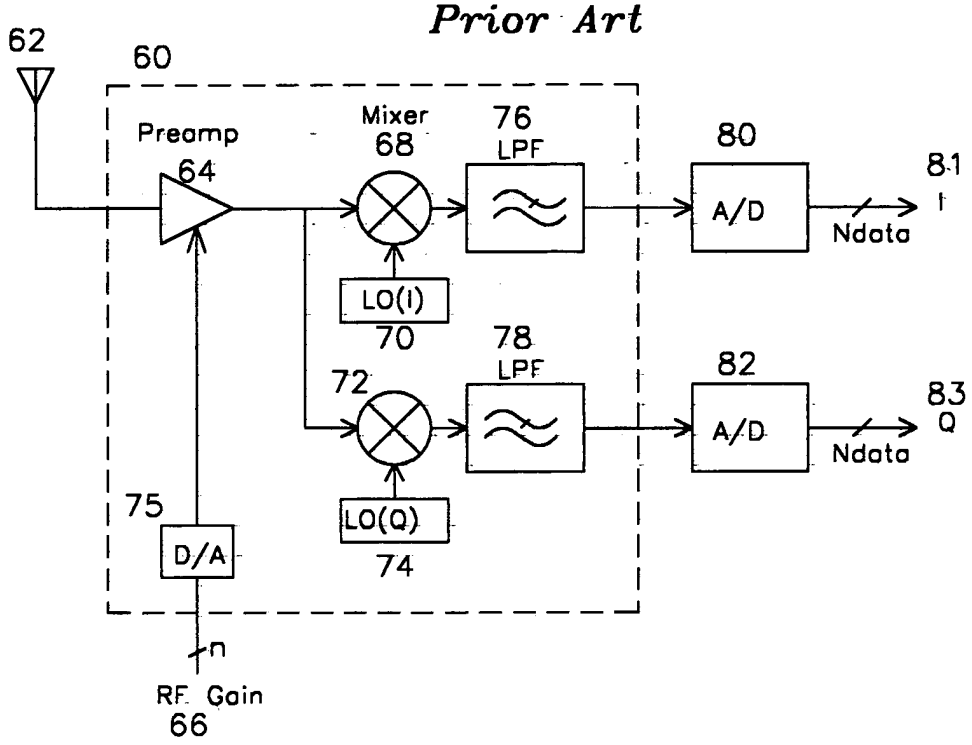


Figure 3
Prior Art

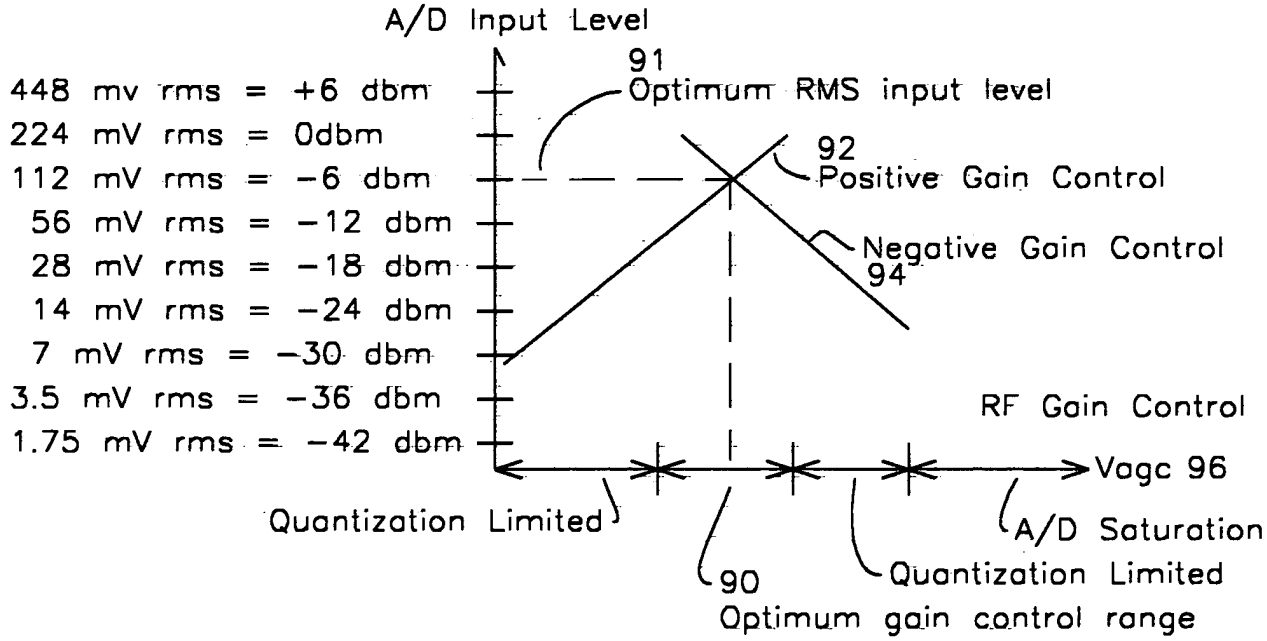


Figure 4

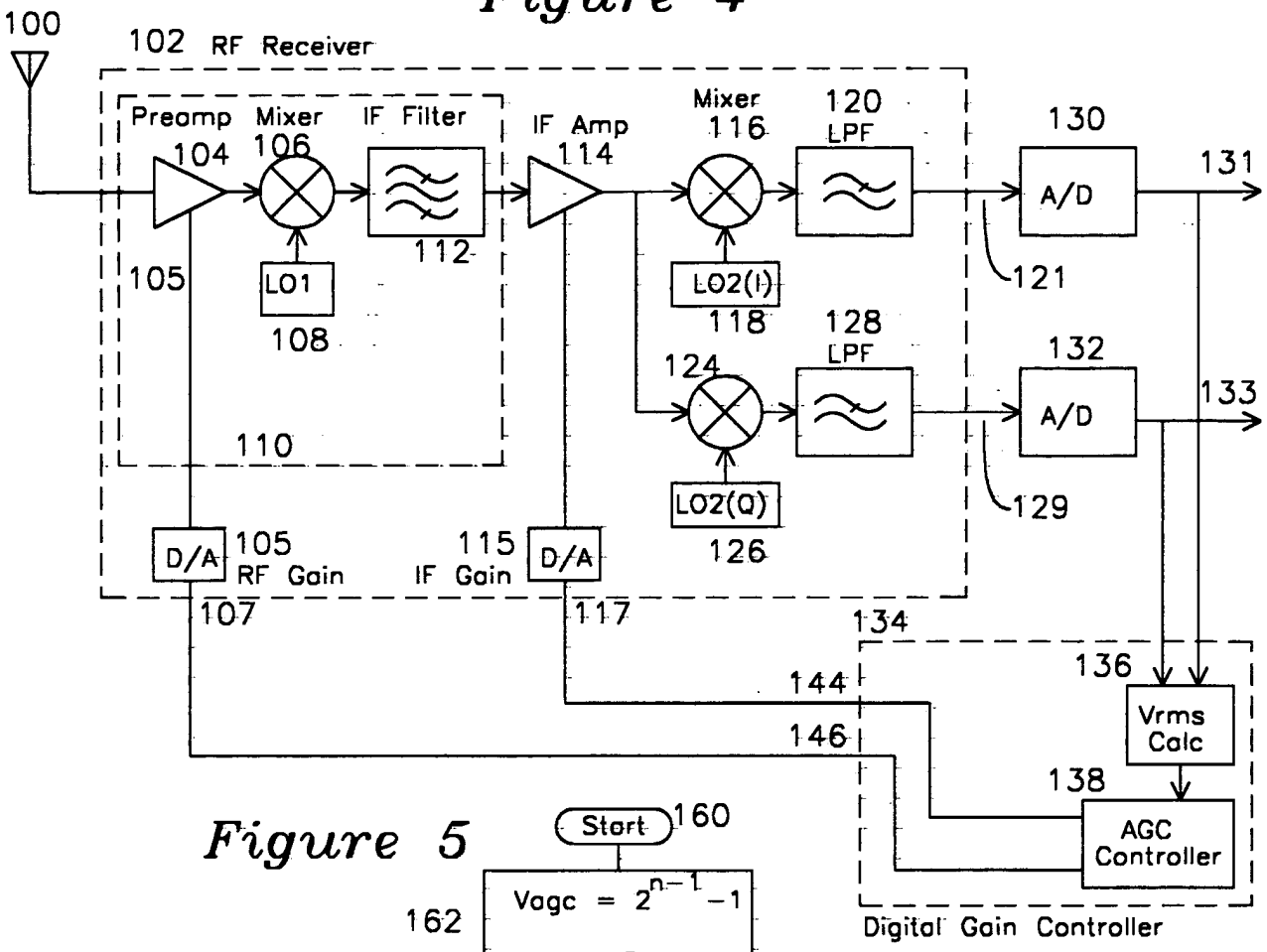
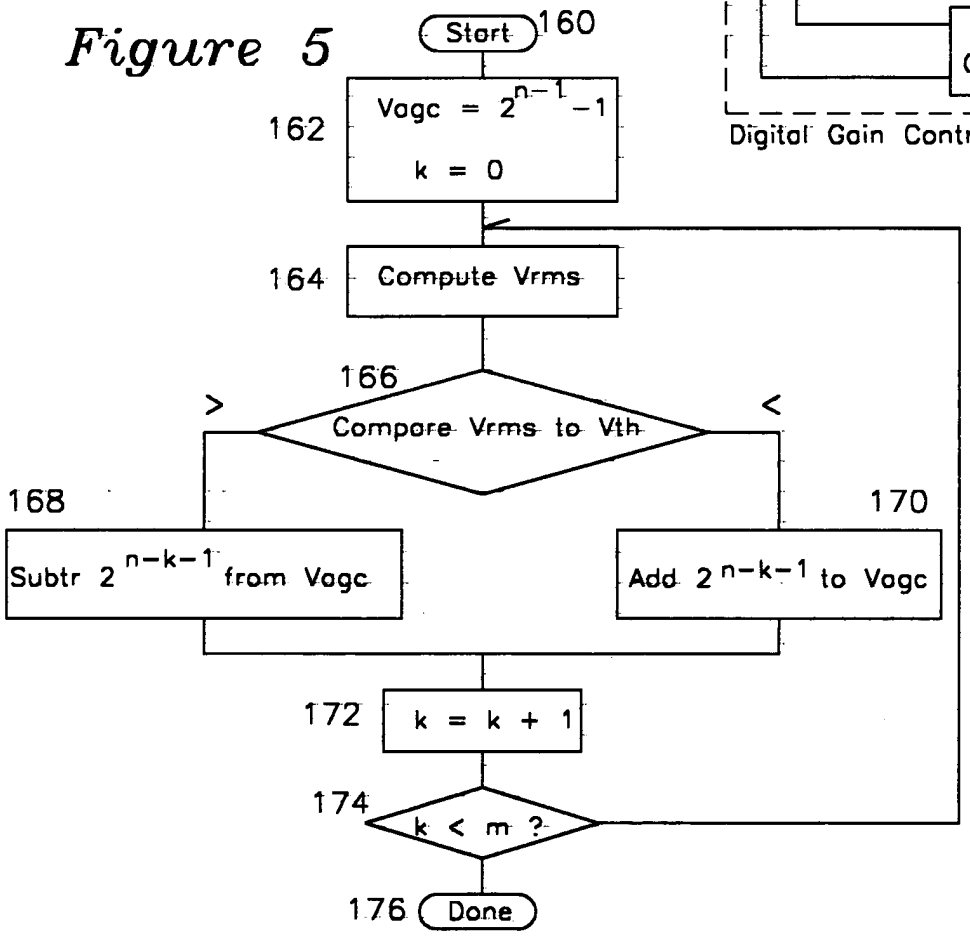


Figure 5



m=# of interations
k=iteration number
n=number of agc ctl bits

Figure 6

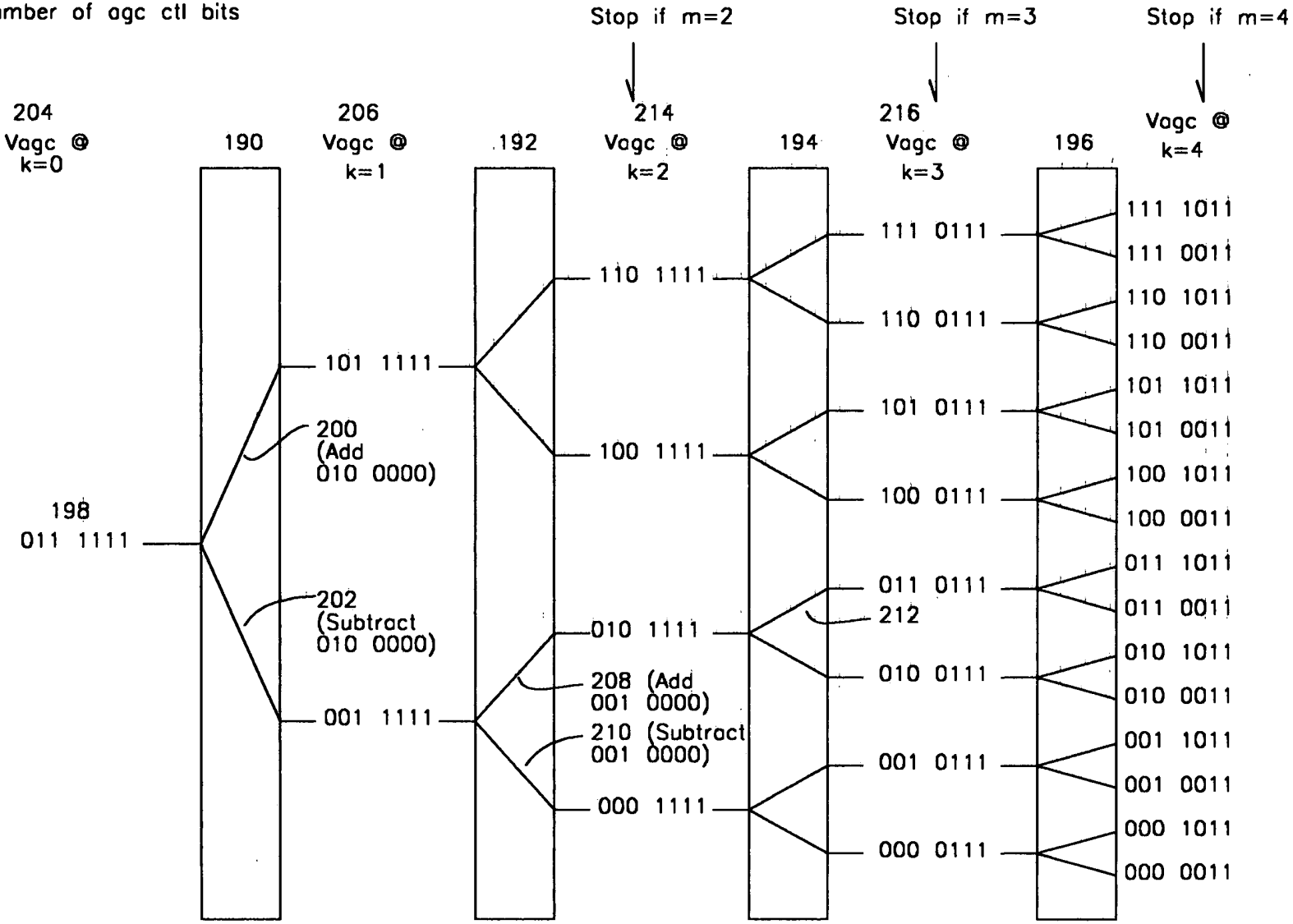


Figure 7

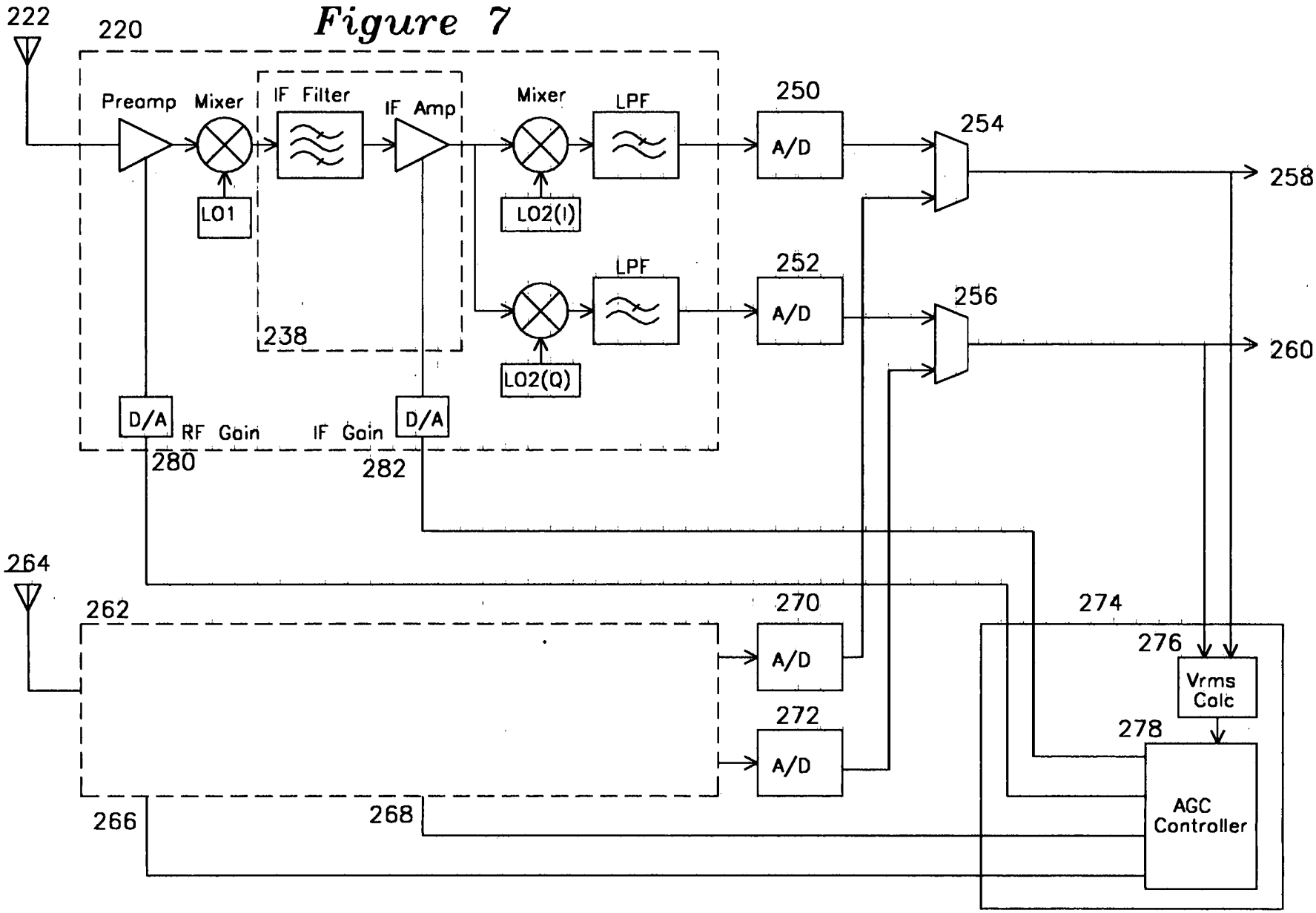

222
220
Preamp
Mixer
IF Filter
IF Amp
Mixer
LPF
250
A/D
254
258
LO1
LO2(I)
LPF
252
A/D
256
260
238
LO2(Q)
D/A
RF Gain
IF Gain
D/A
280
282
264
262
270
A/D
274
276
Vrms Calc
272
A/D
278
AGC Controller
266
268

Figure 8

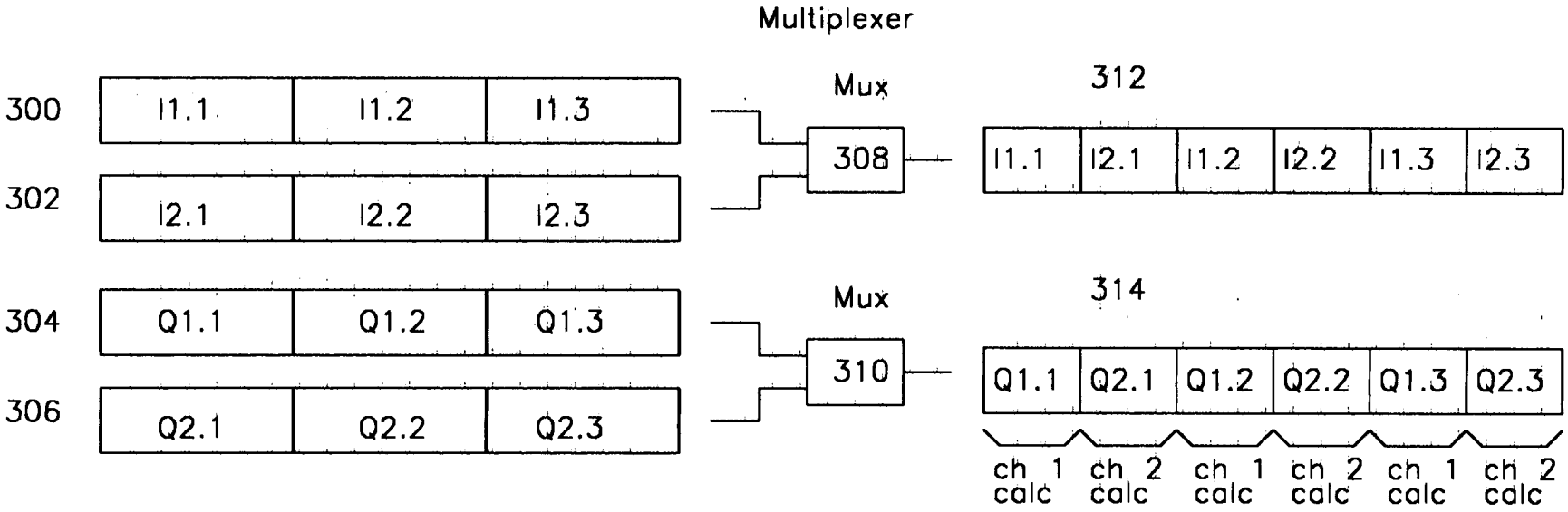
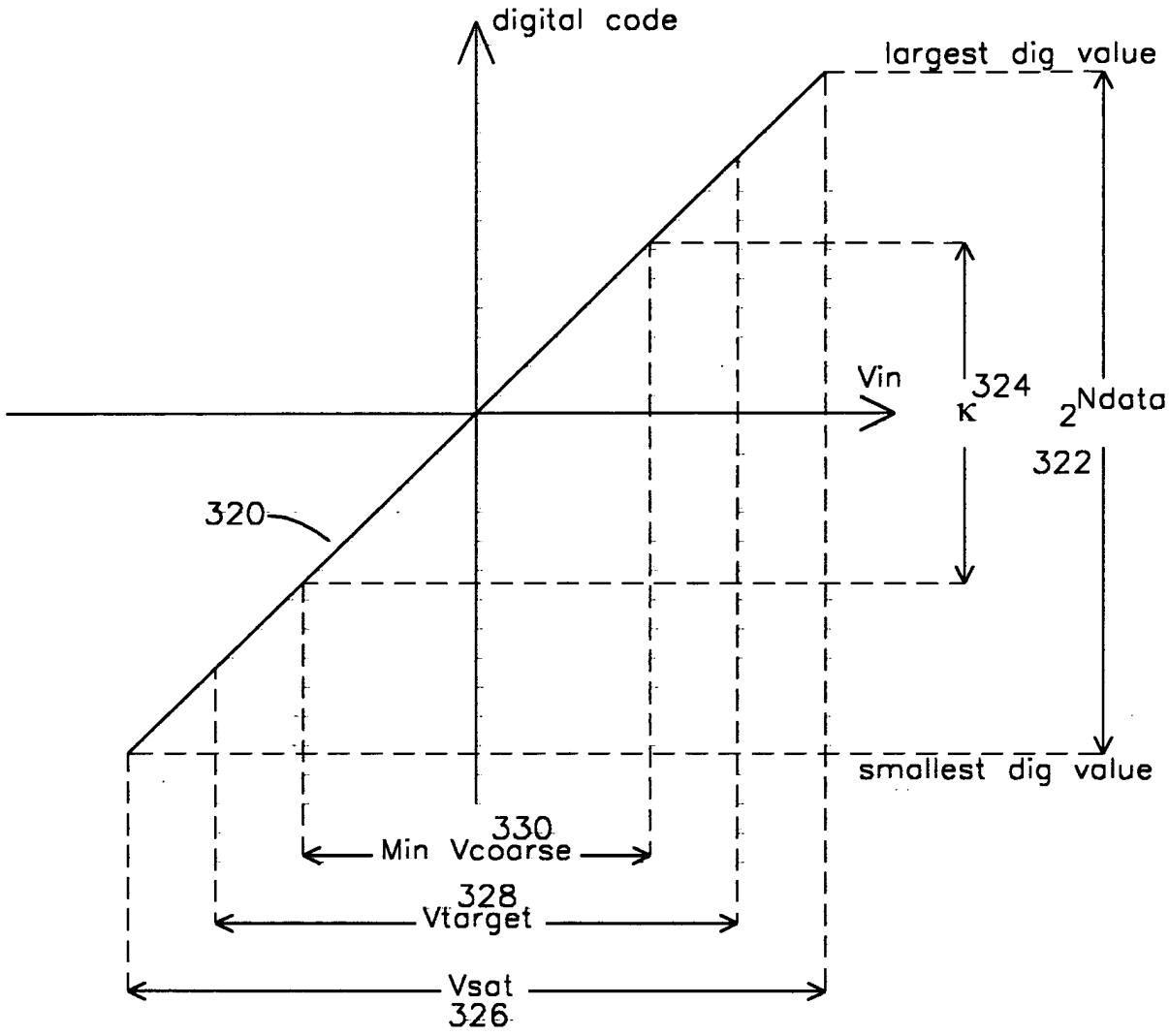

Multiplexer
300
I1.1
I1.2
I1.3
302
I2.1
I2.2
I2.3
304
Q1.1
Q1.2
Q1.3
306
Q2.1
Q2.2
Q2.3
Mux
308
Mux
310
312
I1.1
I2.1
I1.2
I2.2
I1.3
I2.3
314
Q1.1
Q2.1
Q1.2
Q2.2
Q1.3
Q2.3
ch 1 calc
ch 2 calc
ch 1 calc
ch 2 calc
ch 1 calc
ch 2 calc

Figure 9


digital code
largest dig value
Vin
κ 324
2^Ndata
322
320
smallest dig value
330
Min Vcoarse
328
Vtarget
Vsat
326